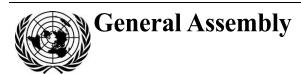
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# Progress on the renovation of the North Building at the Economic Commission for Latin America and the Caribbean in Santiago

Twelfth report of the Advisory Committee on Administrative and Budgetary Questions on the proposed programme budget for 2021

## I. Introduction

- 1. The Advisory Committee on Administrative and Budgetary Questions has considered the report of the Secretary-General on progress on the renovation of the North Building at the Economic Commission for Latin America and the Caribbean (ECLAC) in Santiago (A/75/347). During its consideration of the report, the Committee met online with representatives of the Secretary-General, who provided additional information and clarification, concluding with written responses dated 28 October 2020.
- 2. The renovation of the North Building is one of the near-term major construction projects identified in the report of the Secretary-General on the strategic capital review (A/72/393). Following the earthquake in Chile in 2010, ECLAC concluded in its seismic resistance assessment of the compound's buildings that the North Building, constructed as a temporary structure in 1989, was in need of mitigation measures. The report of the Secretary-General, submitted pursuant to General Assembly resolution 74/263, section XI, provides information on progress made since the previous report of the Secretary-General on the subject.

<sup>&</sup>lt;sup>1</sup> The Advisory Committee provided related observations and recommendations in its report on the strategic capital review (A/72/7/Add.9). In its previous reports on the ECLAC renovation project, the Committee addressed a number of specific matters (A/72/7/Add.8, A/73/457 and A/74/7/Add.11).





# II. Progress on the implementation of the project

### Cooperation with the host country Government and other Member States

- The Advisory Committee recalls that a host country agreement between ECLAC and the Government of Chile was signed in February 1948, providing for privileges and immunities, including exemptions from local taxes and import duties, for entitled staff and for official purposes, as well as, inter alia, for construction materials, equipment and infrastructure materials. The Committee also recalls that the host country has provided significant support for United Nations operations in Chile and specifically for the ECLAC compound, with the land for the construction and expansion of the ECLAC compound donated by the Government of Chile in 1960 and 1997, respectively (see A/73/457, para. 3). The Secretary-General indicates that the host country has also provided technical support on integrated building information modelling to the ECLAC project team and that, through its "Construye 2025" programme, the host country has provided technical support in the definition of guidelines for the development of a plan for reusing or recycling any components following the dismantling of the building (see A/75/347, para. 26). The Committee was informed, upon enquiry, that building information modelling technology has been implemented since 2009, and that all buildings in the ECLAC compound are now modelled with this technology, which uses three-dimensional models and simulations for engineering, architectural and refurbishment projects, as well as for cost control and structural assessments (see also para. 17 below).
- 4. The Advisory Committee expresses its gratitude to the host country for its support to ECLAC and trusts that the Secretary-General will continue to engage with the host country to ensure the success of the project. Furthermore, the Committee encourages the Secretary-General to also continue to engage with other Member States to seek voluntary contributions and other forms of support for the project.

### Project governance and management

- Details with respect to project governance and management, including the project team, are described in the report of the Secretary-General (A/75/347, paras. 7-12). The project owner is the Executive Secretary of ECLAC, and the project governance structure has remained unchanged, with the overall management of the project as follows: (a) a stakeholders committee is meeting regularly, including on matters related to the coronavirus disease (COVID-19) pandemic, and has established a working group on occupational health and safety, accessibility and compliance with international standards and the United Nations Disability Inclusion Strategy (see paras. 10 (b) and 14 below) and a working group on sustainability; (b) coordination with the Global Asset Management Policy Service at Headquarters is continuing through regular meetings, general project oversight, technical guidance and advice; and (c) an independent risk management firm, working on four United Nations construction projects, namely at ECLAC, the Economic Commission for Africa, the Economic and Social Commission for Asia and the Pacific and the United Nations Office at Nairobi, is on board, with a contract through until November 2024. Upon enquiry, the Advisory Committee was informed that the contract for the lead consulting firm for architectural and engineering services was awarded in December 2019 and signed in January 2020.
- 6. The ECLAC project management team will continue to consist of three staff, comprising 1 National Professional Officer, 2 Local level posts and 1 Project Coordinator (P-3), to be cost-shared with the project to replace blocks A–J at the United Nations Office at Nairobi and located in the Global Asset Management Policy

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Service at Headquarters. Upon enquiry, the Advisory Committee was informed that the recruitment of the Project Coordinator had been delayed until the start of construction works in 2022 as all global capital projects are experiencing schedule delays caused by the COVID-19 pandemic (see paras. 10–12 below); related resources had been included in the requirements for 2021. The Committee was also informed that, in the interim, support for the ECLAC project team was being provided by existing staff in the Global Asset Management Policy Service. As the recruitment of the cost-shared Project Coordinator (P-3) will not take place in 2021, and the related financial resources are therefore not required, the Advisory Committee recommends a commensurate reduction of the related amount under section 21, Economic and social development in Latin America and the Caribbean, including an adjustment of any related non-post requirements.

## Project schedule and risk management

- 7. Details with respect to risk management and the overall project schedule are described in the report of the Secretary-General (A/75/347, paras. 15–24 and paras. 55–60). The overall timeline of the project remains unchanged, however, it is estimated that the request for proposals for construction will take up to 12 months, with an expected contract award in December 2021. The construction is now due to start in January 2022, 12 months after the originally planned start date, but is still expected to be completed in September 2023. Upon enquiry, the Advisory Committee was informed that the timely completion of the project was possible through a four-to six-month acceleration of the construction phase as a result of the advance purchase of equipment and furniture from the local market. The Committee was also informed that the delayed start and the shortened construction phase would not result in additional costs beyond the approved maximum overall project cost. The Advisory Committee notes the measures taken but expresses concern that the construction phase, which was due to start in January 2021, is now 12 months behind the original project schedule.
- 8. The most recent cost sensitivity analysis has identified the following top five risks, as at June 2020:<sup>2</sup> (a) schedule delay in the start of construction owing to the COVID-19 pandemic; (b) owner-directed changes (late design requirements and optional scope additions), including redesigns as a result of the COVID-19 pandemic; (c) schedule delay relating to the availability of materials, including as a result the COVID-19 pandemic; (d) labour strike; and (e) seismic event (ibid., figure II and para. 24).
- 9. The Secretary-General indicates that the first quantitative analysis of risks (Monte Carlo simulation)<sup>3</sup> was generated in 2019 and showed that at the United Nations benchmark "P80" level,<sup>4</sup> the project was expected to come in at approximately \$14.9 million, or \$0.6 million over budget, with a confidence level of 30 per cent. The third and most recent Monte Carlo analysis, conducted in May 2020, reveals that the confidence level has increased to 40 per cent. The cost histogram, produced as a result of the Monte Carlo simulation, illustrates that the level of

<sup>2</sup> The Advisory Committee recalls that, as at March 2019, the top five risks were as follows: (a) owner-directed changes (late design requirements and optional scope additions); (b) interior renovations; (c) consultancy; (d) schedule delays; and (e) cost escalation (see also A/74/7/Add.11, para. 8).

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<sup>&</sup>lt;sup>3</sup> A Monte Carlo simulation is a statistical analysis method used to better understand the impact of risks in a project, by using a range of minimum to maximum values with regard to time frames and cost estimates for stages and components, through a computer-based simulation that runs multiple random project scenarios (see A/74/7/Add.11, para. 9 (footnote)).

<sup>&</sup>lt;sup>4</sup> The "P80" benchmark is a target confidence level that the project cost will not exceed the total cost 80 per cent of the time.

confidence for the project to be completed within the approved budget, without any further mitigation action, has risen by 10 percentage points from the 2019 simulation. The confidence level remains relatively low for the project to be completed within the approved budget of approximately \$14.3 million, with a "P80" confidence level at \$14.8 million, or approximately \$0.5 million over budget (ibid., figure I and paras. 19–20).

#### Coronavirus disease pandemic risk mitigation measures

- 10. The Secretary-General indicates that integrated risk management will continue throughout the duration of the project with the highest-ranked emerging risk relating to the COVID-19 pandemic, which, as noted above, also impacts other identified risks. The Secretary-General describes a number of comprehensive measures to mitigate the potential impact of the COVID-19 pandemic, which are highlighted below:
- (a) Proactive procurement measures, such as an accelerated bidding process, aimed at mitigating related schedule delays by receiving equipment and systems in advance for on-site storage and ready availability at the start of construction and, as a result, the avoidance of possible schedule delays (ibid., paras. 20, 24 (a) and (c); see also para. 20 below);
- (b) The development of solutions, and obtaining project owner and stakeholder approvals, for workspace design requirements to ensure the health and safety of occupants is being undertaken by the project management team, as well as by the working group on occupational health and safety, accessibility and compliance with international standards and the United Nations Disability Inclusion Strategy (A/75/347, paras. 5, 8, 9 (a), 24 (b), 38 and 47);
- (c) A delay in the recruitment of the Project Coordinator (P-3) in order to mitigate the risk of overexpenditure (ibid., para. 12).
- 11. Upon enquiry, the Advisory Committee was provided with additional details on the steps taken to mitigate the potential risks related to the COVID-19 pandemic, including the implementation of guidelines and protocols for contractors of construction projects, in accordance with local regulations; measures such as physical distancing in all work areas and revised office space design; and preliminary design and simulations of the performance of the heating, ventilation and air conditioning systems. The Committee notes from the information provided that no schedule delays have so far been identified owing to the COVID-19 pandemic.
- 12. The Advisory Committee recognizes the fluid situation of the COVID-19 pandemic and trusts that the Secretary-General will provide a status update on the potential impact to the General Assembly at the time of its consideration of the present report (see also A/75/7 and A/75/7/Corr.1, chap. II, para. XI.9).
- 13. The Advisory Committee recommends that the General Assembly request the Secretary-General to closely monitor and mitigate project risks, ensure the delivery of the project within the scope, budget and timeline, as approved by the General Assembly, and to include in the next progress report an update on risk management and the related mitigation measures, including with respect to the impact of the COVID-19 pandemic.

### Planning and design activities

14. Progress on the planning and design activities is described in the report of the Secretary-General (A/75/347, paras. 36–54). In view of the COVID-19 pandemic, the project management team is monitoring the developments at ECLAC and other United Nations locations on measures to facilitate the gradual return to the office. The

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Secretary-General also indicates that the current layout would enable physical distancing and, while no changes have been proposed at this stage, the project management team will determine how to incorporate the best practices and lessons learned from other United Nations locations and from the public and private sectors. Furthermore, related design elements to be considered would include dynamic layouts; predefined complementary physical barriers to subdivide the building into six independent areas; exits close to each work area to prevent excessive contact; and outdoor areas for informal meetings or work-related activities. The Secretary-General also indicates that the final design will comply in all aspects with international standards for use by persons with disabilities, in accordance with the United Nations Disability Inclusion Strategy.

- 15. The Advisory Committee recalls that, as part of a pilot project for the North Building space planning analysis, which commenced in March 2019, two types of ergonomic workstations, 10 items in total, were purchased directly from a local furniture distributor (see A/74/7/Add.11, para. 12). Upon enquiry, the Committee was informed that the furniture was currently in use and had been adapted to comply with the protocols and guidelines related to the COVID-19 pandemic, such as physical distancing and easily cleaned surfaces. The Committee was also informed that related lessons learned would be incorporated into the final set-up of the furniture once the construction phase was complete.
- 16. While the Advisory Committee notes that the flexible workplace project is supposed to address all user and workspace requirements, the current and potential post-COVID-19 pandemic considerations regarding staff safety, health, well-being and productivity, as well as the financial impact, may have implications for the intended benefits of the project. The Committee therefore recommends that the General Assembly request the Secretary-General to provide an assessment of the flexible workplace project, taking into consideration all the challenges and opportunities, including flexible working arrangements, and present an update thereon in the context of the next progress report (see also A/75/7/Add.13, A/75/7, chap. II, paras. XI.10 (a) and XI.15, A/74/7/Add.18 and General Assembly resolution 73/279 A, sect. VI).

#### Seismic mitigation

The Advisory Committee recalls the need for seismic mitigation measures for the ECLAC North Building to ensure compliance with the minimum standards for seismic resistance, as the metallic ceilings in the building are non-compliant with the latest seismic codes. The Committee also recalls that the safety concerns also pertain to fire protection and egress and that, following the 2010 earthquake, a number of seismic improvements, repairs and maintenance were performed on all ECLAC buildings, with the exception of the North Building. The Committee further recalls that the scope of the structural engineering services to be provided by the lead consulting firm would include modelling simulation software for a detailed analysis of the behaviour of the existing base building structure during a high-intensity seismic event (A/74/7/Add.11, paras. 13–15). The Secretary-General indicates in paragraph 42 of his present report that a complete analytical assessment of the existing structural components and systems of the North Building has now been carried out in order to review its compliance with current seismic regulations and evaluate the soundness of the current structures and components for reuse in the construction of the new building. According to the Secretary-General, the findings indicate that the existing structure reacts well in response to high-intensity movements in terms of roof loads and building components and can be recycled for the renovation with adequate reinforcements in specific stressed areas.

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- 18. The Advisory Committee trusts that detailed information on the planned seismic mitigation measures will be included in future progress reports on the renovation of the ECLAC North Building. The Committee continues to stress the importance of close coordination between ECLAC and the Secretariat in New York, in particular the Global Asset Management Policy Service, to ensure proper oversight and governance in all aspects of the project, including seismic mitigation.
- 19. The Advisory Committee recalls its concern with respect to the totality of the potential structural requirements for the project, in particular the three-level underground parking garage, located underneath the North Building and designed in accordance with various codes applicable at the time it was built, in 2004 (A/74/7/Add.11, para. 14). Upon enquiry, the Committee was informed that the threelevel underground garage was located partially under the eastern wing of the North Building, had been included in the aforementioned assessment and had been deemed code-compliant and in good condition. The Committee was also informed that the eastern wing of the North Building, including the underground parking garage, would be fitted with an expansion joint system to allow for isolated structures to move separately in case of a seismic event. In addition, the underground parking garage elevator and staircase would be integrated into the main lobby of the renovated building, without modifications to the vehicular entrance and exit. The Advisory Committee trusts that the overall stability of the garage structure and, in particular, its adherence to the most recent seismic safety codes, will continue to be monitored closely, and that every effort will be made to absorb any costs for renovation or repairs, if required. The Committee looks forward to continued updates on the status of the three-level underground garage in future progress reports.

#### Procurement and use of local materials and knowledge

20. Details with respect to procurement activities and the use of local materials and knowledge are described in the report of the Secretary-General (A/75/347, paras. 27–32). As indicated in the report of the Secretary-General, the procurement of materials will commence prior to the start of construction to reduce the risk of long manufacturing lead times and importation delays and will utilize local companies as much as possible, including for height-adjustable workstations; auxiliary and support furniture; heating, ventilation and air conditioning components; solar photovoltaic plant components; wastewater treatment plant and its components; and the temporary modular building (swing space). Furthermore, the architectural and engineering services contract was awarded to a Chilean-Spanish joint venture company. The Advisory Committee reiterates the importance of ensuring the use of locally sourced and manufactured materials, as well as local labour and expertise, and looks forward to updates thereon in future progress reports.

## Energy efficiency strategy and related cost savings

21. Details with respect to the project's energy efficiency strategy are described in the report of the Secretary-General (ibid., paras. 4 (f) and (h), 6, 39 and 43–44). The Secretary-General indicates that the ECLAC energy efficiency report shows that the new building will consume between 41 per cent and 48 per cent less energy than the current building, thereby confirming the previous projections. The Advisory Committee recalls that the projected annual energy requirements of the North

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<sup>&</sup>lt;sup>5</sup> The Secretary-General indicates that, based on the analysis and design of the wastewater treatment plant, it is estimated that local manufacturers of the required products could supply approximately 70 per cent of the wastewater treatment plant's components, including piping, connections and tanks (A/75/347, para. 32).

Building comprise two elements: (a) energy usage during regular operating hours; and (b) energy usage during the building's after-hours operations and on cloudy days. The Committee also noted at the time that, at this early stage of the project, the calculated figures were estimates in order to model the benefits of photovoltaic energy and should therefore be considered preliminary, with the calculations to be clarified once the lead consultant firm for architectural and engineering services was on board and the project would move forward. The Committee also recalls that the renovation project would result in a "net-zero" building, where the total amount of energy used by the building on an annual basis is equal to or less than the amount of renewable energy generated on site, often producing excess energy for use elsewhere, including redirection to the national grid (see A/74/7/Add.11, paras. 18–20). Upon enquiry, the Committee was informed that the renovated ECLAC North Building would be the first net-zero building within the United Nations system.

- 22. The Advisory Committee welcomes the planned renovation of the ECLAC North Building as a sustainable and energy-efficient, net-zero building. The Committee recommends that the General Assembly request the Secretary-General to continue to include in future progress reports detailed information on the energy to be produced, used and redirected by the North Building's photovoltaic plant.
- 23. With respect to the sharing of best practices and applicable lessons learned in all aspects of the project, including the ECLAC energy efficiency strategy, the Advisory Committee reiterates that knowledge gained should be shared among other United Nations construction projects (see also A/74/7/Add.11, para. 22).

# III. Project expenditures and anticipated costs

- 24. Details with respect to project expenditures and anticipated costs are provided in the report of the Secretary-General (A/75/347, paras. 61–65 and annex). The ECLAC renovation project continues to be recorded under a multi-year construction-in-progress special account, approved by the General Assembly in resolution 73/279 A, whereby funding does not expire at the end of a financial period and, upon the completion of the project, expenditures are to be reported, with any unused amounts to be returned to Member States.
- 25. The Secretary-General indicates that the overall cost of the project has remained unchanged at \$14,330,200. As at 31 July 2020, a projected unused balance of \$268,100 would be carried forward according to the stipulation of the multi-year construction-in-progress special account. The net funding requirements for 2021 would amount to \$1,642,200, comprising projected expenditures of \$1,910,300 less the aforementioned projected unused balance from 2020, comprising:
- (a) \$363,200 under section 21, Economic and social development in Latin America and the Caribbean, related to the cost of the project management team, which will provide for the continuation of the staff of the project management team (1 National Professional Officer and 2 Local level posts) and 25 per cent of the cost of one P-3 Project Coordinator, cost-shared with the project to replace blocks A–J at the United Nations Office at Nairobi (see para. 6 above);
- (b) \$1,547,100 under section 33, Construction, alteration, improvement and major maintenance, for professional services related to the lead consulting firm, the independent risk management firm, travel costs, escalation costs and the provision for contingency.
- 26. Upon enquiry, the Advisory Committee was informed that, as at 30 September 2020, the projected unused balance remained at \$268,100, unchanged since 31 July

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2020. The Advisory Committee trusts that an update on the unused balance will be provided to the General Assembly at the time of its consideration of the present report.

## V. Conclusion

- 27. The recommendations of the Secretary-General on proposed actions to be taken by the General Assembly are set out in paragraph 67 of his report. Subject to its recommendations and observations above, the Advisory Committee recommends that the General Assembly:
  - (a) Take note of the report of the Secretary-General;
- (b) Appropriate an amount of \$1,583,000 for the project in 2021, comprising \$158,500, under section 21, Economic and social development in Latin America and the Caribbean, and \$1,424,500 under section 33, Construction, alteration, improvement and major maintenance, of the proposed programme budget for 2021, which would represent a charge against the contingency fund.

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